REMARKS

Favorable reconsideration of this application in light of the above amendments and the following remarks is respectfully requested.

Claims 4-20 are pending in this application. Claims 1-3 are canceled herein. Claims 4, 11 and 15 are amended herein. Claims 21-23 are newly added herein. No claims have been allowed.

Claim Rejections – 35 U.S.C. § 112

Claim 2 is rejected under 35 U.S.C. § 112, second paragraph, as failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The rejection derives from lack of antecedent basis with respect to applicant's claimed "the transparent substrate."

In response, and for unrelated reasons, applicant has canceled claims 1-3.

In light of the foregoing response, applicant respectfully requests that the Examiner's rejection of applicant's claim 2 under 35 U.S.C. § 112, second paragraph, be withdrawn.

Claim Rejections - 35 U.S.C. 102

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Atobe et al. (U.S. Patent No. 5,999,306; hereinafter "Atobe").

Claims 4-7, 15-16 and 19-20 are rejected under 35 U.S.C. § 102(b) as being anticipated by Little et al. (U.S. Patent No. 6,043,807; hereinafter "Little").

Claims 4, 9-11, 13-15 and 17-18 are rejected under 35 U.S.C. § 102(b) as being anticipated by Shrauger et al. (U.S. Patent No. 6,633,426; hereinafter "Shrauger").

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP 2131 (citing *Verdegaal Bros. v. Union Oil Co. of California* (citation omitted)).

Atobe, Little and Shrauger each teach a micro-mirror device related to applicant's micro-mirror device. Atobe (Fig. 2) and Shrauger (cover figure) teach micro-mirror devices that employ a tortional beam that inherently or implicitly if not explicitly supports a micro-mirror at both of opposite ends. Little (Fig. 3a and 3b) teaches a micro-mirror device that comprises a micro-mirror supported at only one of its ends.

In response in a first instance, applicant has canceled claims 1-3.

In response in a second instance, applicant has amended claims 4, 11 and 15 to incorporate therein limitations that applicant believes to patentably distinguish applicant's invention from that which is taught within Atobe, Little or Shrauger. In particular, applicant has amended claims 4, 11 and 15 to incorporate therein the limitations that: (1) applicant's micro-mirrors are supported at only one of their ends; (2) applicant's micro-mirrors are registered with respect to single pairs of first deflection electrodes and second deflection electrodes; and (3) applicant's micro-mirrors are physically constrained between individual pairs of applicant's first deflection electrodes and second deflection electrodes. Support for these limitations newly

incorporated into claims 4, 11 and 15 is found within applicant's specification at paragraph 0031 and 0035 as newly amended, and paragraph 0035.5 as newly added. In turn, those newly amended or added paragraphs find support within at least applicant's Fig. 2 to Fig. 4 as originally filed.

In comparison, both Atobe and Shrauger teach tortional beam micro-mirror structures that inherently or implicitly, if not explicitly, provide support at a pair of opposite ends of a plurality of micro-mirrors. Thus, since applicant discloses and claims within claims 4, 11 and 15 a micro-mirror structure with single end support only of a micro-mirror, applicant asserts that claims 4, 11 and 15 may not properly be rejected under 35 U.S.C. § 102(b) as being anticipated by Atobe or Shrauger. Within applicant's claims 4, 11 and 15, the element of micro-mirror end support only is simply not identical with the element of tortional axis opposite end support provided within micro-mirror structures taught within Atobe and Shrauger.

In comparison with respect to Little, applicant notes that Little at Figs. 3a/b, left hand side, teaches a micro-mirror structure related to applicant's micro-mirror structure as disclosed and claimed within claims 4, 11 and 15. Little's micro-mirror structure employs mated pairs of first deflection electrodes 44 and second deflection electrodes 42a/b. However, an individual micro-mirror is not physically constrained between a first deflection electrode and a second deflection electrode. Since: (1) such physical constraint of a micro-mirror is an element of applicant's invention as claimed within claims 4, 11 and 15; and (2) that element of applicant's invention is clearly explicitly not taught within Little, and in fact is taught away by Little, applicant asserts that claims 4, 11 and 15 may not properly be rejected under 35 U.S.C. § 102(b) as being anticipated by Little.

Since all remaining claims within the foregoing rejections are dependent upon claims 4, 11 or 15 and carry all of the limitations of claims 4, 11 or 15, applicant additionally asserts that those remaining claims may also not properly be rejected under 35 U.S.C. § 102(b) as being anticipated by Atobe, Little or Shrauger.

In light of the foregoing responses, applicant respectfully requests that the Examiner's rejections of claims 1-3 under 35 U.S.C. 102(b) as being anticipated by Atobe; (2) claims 4-7, 15-16 and 19-20 under 35 U.S.C. § 102(b) as being anticipated by Little; and (3) claims 4, 9-11, 13-15 and 17-18 under 35 U.S.C. § 102(b) as being anticipated by Shrauger, be withdrawn.

Claim Rejections – 35 U.S.C. § 103

Claim 8 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Little in view of Atobe. Atobe is cited as teaching a deflection electrode as a transparent electrode.

In response, applicant predicates patentability of claim 8 upon its dependence upon claim 4.

In light of the foregoing response, applicant respectfully requests that the Examiner's rejection of claim 8 under 35 U.S.C. § 103(a) as being unpatentable over Little in view of Atobe be withdrawn.

Other Considerations

Applicant has newly added claims 21-23 that claim applicant's first deflection electrodes and second deflection electrodes employed as stops with respect to travel of

applicant's deformable mirror (or related) structures. Support for newly added claims 21-23 is found within applicant's paragraph 0035.5 as newly added, which in turn finds support within applicant's Fig. 4 and Fig. 6 as originally filed.

Applicant acknowledges Li et al. (U.S. Patent No. 6,729,545) as cited by the Examiner but not employed in rejecting applicant's claims to applicant's invention, as generally pertinent to applicant's invention. No fee is due as a result of this response.

SUMMARY

Applicant's invention as disclosed and claimed within claim 4, claim 11 and claim 15 is directed towards a micro-mirror structure, its method of fabrication and its method of operation. The micro-mirror structure includes a micro-mirror singly end supported and constrained in travel between a singly mated pair of deflection electrodes. Absent from the prior art of record employed in rejecting applicant's claims to applicant's invention is a teaching of each and every limitation within applicant's claimed invention.

CONCLUSION

On the basis of the above amendments and remarks, reconsideration of this application, and its early allowance, are respectfully requested.

Any inquiries relating to this or earlier communications pertaining to this application may be directed to the undersigned attorney at 248-540-4040.

Respectfully submitted,

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